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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,037	11/16/2001	Kazuhito Gassho	111104	7948

7590

10/04/2005

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EXAMINER

ROBINSON, MYLES D

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/988,037	GASSHO ET AL.	
	Examiner	Art Unit	
	Myles D. Robinson	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 - 18 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference characters tr6A and tr6B in Figure 4 and Figure 7 and reference character tr6A in Figure 9. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

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3. The disclosure is objected to because of the following informalities: a grammatical error is found in line 7 of page 4. It is recommended that the applicant revise the specification from "It is accordingly required to transmits a new print job" to "It is accordingly required to ~~transmits~~ transmit a new print job".

Furthermore, a grammatical error is found in line 23 of page 15. It is recommended that the applicant revise the specification from "on he other hand" to "on he the other hand".

Appropriate correction is required.

Claim Objections

4. The following quotation of 37 CFR 1.75(a) is the basis of the objection:

- (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

5. **Claims 6 – 9, 11, 12, 14, 15, 17 and 18** are objected to under 37 CFR 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Claims 6, 9 and 11 recite in lines 4, 6 and 4 of each claim, respectively, the limitation element "a job creation module that creates at least one daughter job... as a mother job" whereas the created job is a mother or daughter job. In the search for prior art, the Office interprets the at least one daughter jobs as copies of a mother job. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

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Furthermore, **claims 14 and 17** recites in line 4 of both claims the limitation performs the step or function of “creating at least one daughter job... as a mother job” whereas it is uncertain whether the created job is a mother or daughter job. In the search for prior art, the Office interprets the at least one daughter jobs as copies of a mother job.

Furthermore, **claim 12** recite in line 7 the limitation element “a main printing module that carries out main printing with a daughter job, which is created from the print job as a mother job” whereas the created job is a mother or daughter job. In the search for prior art, the Office interprets the at least one daughter jobs as copies of a mother job.

Furthermore, **claims 15 and 18** recites in lines 4 and 5 of each claim, respectively, the limitation performs the step or function of “carrying out main printing with a daughter job, which is created from the print job as a mother job” whereas it is uncertain whether the created job is a mother or daughter job. In the search for prior art, the Office interprets the at least one daughter jobs as copies of a mother job.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 9, 11, 14, and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by **Hube** (U.S. Patent No. 5,517,316).

Referring to **claim 9**, Hube discloses a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1, said job management apparatus comprising a proof printing module that shifts a print job (see Fig. 10, parent job A), to which a proof printing instruction is given (column 8, lines 10 – 17), to a printable status, a job creation module that creates a daughter job (see Fig. 10, offspring jobs A1, A2, A3, ... AN, Fig. 11, step 216, and column 7, lines 22 – 25) from the print job as a mother job (see Fig. 10, parent job A) after conclusion of proof printing (column 8, lines 10 – 17), where attribute information of the daughter job with regard to at least a number of copies to be printed has a predetermined relation to corresponding attribute information of the mother job (see Fig. 10, pointers 203 and 202 to database 200, Fig. 11, steps 212, 222, column 6, lines 37 – 39, 52 – 55, column 7, lines 38 – 51, and column 8, lines 3 – 5, 17 – 19), and a main printing module that shifts the daughter job to a printable status in response to input of a main printing instruction (see Fig. 11, steps 218, 228 and column 8, lines 8 – 10, 26 – 29). Furthermore, wherein the flow diagram in Fig. 11 in which the procedures may loop through the iterative selection of “no” in step 218 is considered analogous to creating a daughter job from a mother job, or an offspring job A1, A2, A3, ... AN from a parent job A, after the conclusion of a proof printing.

Referring to **claim 11**, Hube discloses a job management apparatus that manages a status of a print job to be executed with a printing apparatus, said job

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management apparatus comprising a job creation module that creates at least one daughter job (see Fig. 10, offspring jobs A1, A2, A3, ... AN) from a print job, to which a proof printing instruction is given, as a mother job (see Fig. 10, parent job A, Fig. 11, steps 204, 216, column 6, lines 43 – 47, column 7, lines 9 – 22, 57 – 58, and column 8, lines 6 – 8), a proofing module that carries out proof printing with regard to one of the mother job and the at least one daughter job (see Fig. 11, step 218 and column 8, lines 8 – 14), and a main printing module that carries out main printing with regard to a residual one (see Fig. 10, offspring jobs A1, A2, A3, ... AN) of the mother job and the at least one daughter job (see Fig. 11, steps 208, 228, column 8, lines 6 – 19 and 26 – 28). The offspring jobs A1, A2, A3, ... AN are considered analogous to either the at least one of the daughter jobs or the residual job (see Fig. 10).

Referring to **claim 14**, the rationale provided in the rejection of claim 11 is incorporated herein. In addition, the apparatus of claim 11 performs the method of claim 14.

Referring to **claim 17**, the rationale provided in rejection of claim 14 is incorporated herein. The method of claim 14 is stored as a program of instructions of claim 17 within memory (see Fig. 2, main memory 56 and column 5, lines 31 – 37) and executed by a series of processors (column 5, line 54 – column 6, line 6).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 10, 13 and 16** are rejected under 35 U.S.C. 102(e) as being anticipated by **Tang et al.** (U.S. Patent No. 6,160,629).

Referring to **claim 10**, Tang et al. disclose a job management apparatus that manages a status of a print job to be executed with a printing apparatus, said job management apparatus comprising a holding module that holds only a print job, which has been proof printed in response to a proof printing instruction and waits for input of a main printing instruction (see Fig. 4C, 'Proof and Hold', column 4, lines 37 – 40, 45 – 48, column 4, line 66 – column 5, line 11, column 5, lines 40 – 44, and column 6, lines 2 – 6).

Referring to **claim 13**, the rationale provided in the rejection of claim 10 is incorporated herein. In addition, the apparatus of claim 10 performs the method of claim 13. Furthermore, Tang et al. disclose the method further comprising the steps of setting a proper 'held' status (see Fig. 3, print job temporarily held in storage 42 and permanently in storage 40, column 4, lines 37 – 40, column 4, line 66 – column 5, line 11 and column 5, lines 40 – 44), and carrying out management (column 4, lines 37 – 40 and column 4, line 66 – column 5, line 11).

Referring to **claim 16**, the rationale provided in rejection of claims 13 is incorporated herein. The method of claim 13 is stored as a program of instructions of claim 16 within memory (see Fig. 3, ROM 34) and executed by a series of processors (see Fig. 3, controller 22, column 4, lines 11 – 24).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. ***Claims 1 and 5*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tang et al.** (U.S. Patent No. 6,160,629) in view of **International Standard ISO/IEC10175-1** and in view of **Suzuki et al.** (U.S. Patent No. 6,213,652 B1).

Referring to **claim 1**, Tang et al. disclose a job management apparatus that manages statuses of print jobs, wherein statuses under management include statuses defined by a 'proof printing held' status uniquely set for proof printing, said job management apparatus comprising a holding module (see Fig. 3, disk drive 30, column 4, line 66 – column 5, line 11) that shifts a status of a print job with attribute information representing proof printing to the 'proof printing held' status (see Fig. 4C, 'Proof and Hold', column 5, lines 40 – 44) after conclusion of a preset cycle of proof printing (column 5, lines 17 – 24), and a cancellation module that shifts the print job from the 'proof printing held' status to a printable status in response to an externally input printing instruction (column 4, lines 45 – 49 and column 6, lines 2 – 6) but does not explicitly disclose a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1.

According to International Standard ISO/IEC10175-1, herein after referred to as the standard, defines the 'held' status as a print job that is held in a state that is neither pending printing nor in the process of printing and may be used independently of commands to 'pause' job and 'resume' job (see the standard, p. 116). The 'pause' status of a print job implemented via a user input may be removed with another input commanding a 'resume' status of that print job to restore the print job to a pending printing status (see the standard, p. 66 – 68).

Suzuki et al. disclose a job management apparatus (see Fig. 1, job processing system 10, column 14, lines 53 – 54, column 15, lines 9 – 13 and column 17, lines 29 – 48) that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1. In Fig. 1, the hold queue 19 conforms to the 'held' status disclosed in the standard (see Fig. 3, steps S109, S110, S111, column 16, line 67 – column 17, line 7 and column 18, lines 16 – 22) and the pause queue 21, which operates independently from the hold queue 19, conforms to the print jobs functioning in response to 'pause' and 'resume' commands (see Fig. 34, pausing section 312e, resuming section 312f, column 17, lines 16 – 21, column 46, line 65 – column 47, line 6, column 47, lines 46 – 60). Although Suzuki et al. does not explicitly disclose conformity with the standard, one of ordinary skill in the art at the time of the invention can ascertain the teachings of Suzuki are functionally equivalent to the teachings of the standard.

Tang and Suzuki are combinable because they are both from the same field of endeavor, being print job management systems invoking a job retention status, whether temporarily or permanently. At the time of the invention, it would have been obvious to

one of ordinary skill in the art to include a print job management system that prints a number of proofs of the print job before storing the print job along with independently separate print job queues, one designated for print jobs with 'held' status. The suggestion/motivation for doing so would have been to use interruption and resumption of multi-document print processing to improving efficiency, as suggested by Suzuki et al. (column 4, line 54 – column 5, 40).

Referring to **claim 5**, Tang et al. disclose the apparatus further wherein the print job has attribute information representing a specified number of copies to be printed (column 5, lines 40 – 44 and column 6, lines 2 – 6), and either one of said holding module and said cancellation module updates the attribute information (column 5, lines 17 – 24) representing the number of copies to be printed by execution of proof printing, so as to attain the specified number of copies including a proof (column 4, line 66 – column 5, line 3).

12. **Claims 3 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tang et al.** (U.S. Patent No. 6,160,629) in view of **Suzuki et al.** (U.S. Patent No. 6,213,652 B1) and further in view of **Takayanagi** (U.S. Patent No. 5,046,166).

Referring to **claim 3**, Tang et al. disclose the apparatus discussed above but does not explicitly disclose a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1 nor wherein said cancellation module deletes the attribute information under a predetermined condition and carries out the shift.

Suzuki et al. disclose a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1 as discussed above but does not explicitly disclose wherein said cancellation module deletes the attribute information under a predetermined condition and carries out the shift.

Takayanagi discloses a copier capable of job management (column 3, lines 35 – 52) wherein said cancellation module (see Fig. 3, hard disk device 52) deletes the attribute information (column 7, lines 25 – 39) under a predetermined condition (column 7, lines 40 – 46) and carries out the shift (column 7, lines 46 – 48). The shift operation of the print job is analogous to the operation of moving the image file from storage in hard disk device 52 and sending the image file to printing device 60 for printing. The predetermined condition is analogous to the condition that “the image file is printed out based upon attribute information”.

Tang, Suzuki, and Takayanagi are combinable because they are both from the same field of endeavor, being print job management systems invoking a job retention status, whether temporarily or permanently. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include a proof print job management system with job retention capabilities along with a storage unit capable of erasing the print job and any attribute information associated with the print job once the print job has executed. The suggestion/motivation for doing so would have been to increase the effectiveness of memory management, especially deleting executed print jobs in order to make room for incoming jobs to be stored, whether temporarily or permanently****

Referring to **claim 4**, Takayanagi discloses the apparatus further wherein the predetermined condition is input of a main printing instruction (see Fig. 3, user interface 90 and column 7, lines 40 – 46).

13. **Claims 6, 7, 12, 15 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hube** (U.S. Patent No. 5,517,316) in view of **Tang et al.** (U.S. Patent No. 6,160,629).

Referring to **claim 6**, Hube discloses a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1, said job management apparatus comprising a job creation module that creates at least one daughter job (see Fig. 10, offspring jobs A1, A2, A3, ... AN) from a print job as a mother job (see Fig. 10, parent job A, Fig. 11, steps 204, 216, column 6, lines 43 – 47, column 7, lines 9 – 22, 57 – 58, and column 8, lines 6 – 8), a proof printing module that selects one among the mother job and the at least one daughter job as a proof print job (column 8, lines 10 – 17) and shifts the proof print job to a printable status while holding a residual print job (see Fig. 10, offspring jobs A1, A2, A3, ... AN, Fig. 11, steps 218, 220, 222), and a main printing modules that shifts the residual print job to a printable status in response to input of a main printing instruction (see Fig. 11, steps 208, 228, column 8, lines 6 – 19 and 26 – 28). The offspring jobs A1, A2, A3, ... AN are considered analogous to either the at least one of the daughter jobs or the residual job (see Fig. 10) and are considered to be in a held status when stored in a waiting queue (see Fig. 7, job 156 held in job file 155) separate and independent of a printing queue (see Fig. 7, job 156 processing in print queue 165, column 5, lines 34 – 37 and column 6, lines 29 –

35 and 52 – 55) but does not explicitly disclose a job management apparatus wherein the job creation module creates when given a proof printing instruction.

Tang et al. disclose a job management apparatus (column 4, lines 37 – 40, column 4, line 67 – column 5, line 11) wherein the job creation module creates when given a proof printing instruction (see Fig. 3, user interface 38, Fig. 4C, 'Proof and Hold' menu, column 4, lines 45 – 48, column 5, lines 25 – 27, 40 – 44 and column 6, lines 2 – 6).

Hube and Tang are combinable because they are both from the same field of endeavor, being print job management systems invoking a job retention status, whether temporarily or permanently. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include an instruction to implement proof printing within a print job management system of multiple jobs, some print pending while others held temporarily or permanently. The suggestion/motivation for doing so would have been to provide a variety of advanced print job control features to generate multiple copies, as suggested by Tang et al. (column 1, line 62 – column 2, line 17).

Referring to **claim 7**, Hube discloses the apparatus further wherein said job creation module attaches attribute information, which regards a mapping of the selected print job executed by said proof printing module to the residual print job, to at least either of the selected print job and the residual print job (see Fig. 11, step 212, column 8, lines 3 – 5 and column 7, lines 38 – 51), and said main printing module identifies the residual print job based on the attribute information (column 6, lines 37 – 39 and 53 – 55).

Referring to **claim 12**, Hube discloses a job management apparatus that manages a status of a print job to be executed with a printing apparatus, said job management apparatus comprising a main printing module that carries out main printing with a daughter job (see Fig. 10, offspring jobs A1, A2, A3, ... AN), which is created from the print job as a mother job (see Fig. 10, parent job A, Fig. 11, steps 208, 216, 218, Fig. 12, step 228, column 7, lines 9 – 22, 57 – 58, and column 8, lines 6 – 8), after conclusion of proof printing (column 8, lines 10 – 17), where attribute information of the daughter job with regard to at least a number of copies to be printed has a predetermined relation to corresponding attribute information of the mother job (see Fig. 11, step 212, column 6, lines 37 – 39, 52 – 55, column 7, lines 22 – 25, 29 – 31, 38 – 51 and column 8, lines 3 – 5). The parent job A is considered analogous to either the mother job or the print job, and the offspring jobs A1, A2, A3, ... AN are considered analogous to either the at least one of the daughter jobs or a preset cycle of proof printing (see Fig. 10 and column 7, lines 22 – 25). However, Hube does not explicitly disclose a proofing printing module that carries out a preset cycle of proof printing with regard to a print job, to which a proof printing instruction is given.

Tang et al. disclose a proofing printing module (see Fig. 4C, 'Proof and Hold' menu) that carries out a preset cycle of proof printing with regard to a print job (column 6, lines 2 – 6), to which a proof printing instruction is given (see Fig. 3, user interface 38, column 4, lines 45 – 48 and column 5, lines 25 – 27, 40 – 44).

Referring to **claim 15**, the rationale provided in the rejection of claim 12 is incorporated herein. In addition, the apparatus of claim 12 performs the method of claim 15.

Referring to **claim 18**, the rationale provided in rejection of claim 15 is incorporated herein. The method of claim 15 is stored as a program of instructions of claim 18 within memory (see Hube, Fig. 2, main memory 56 and column 5, lines 31 – 37) and executed by a series of processors (column 5, line 54 – column 6, line 6).

14. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hube** (U.S. Patent No. 5,517,316) in view of **Suzuki et al.** (U.S. Patent No. 6,213,652 B1) and further in view of **Tang et al.** (U.S. Patent No. 6,160,629).

Referring to **claim 8**, Hube discloses the apparatus as discussed above but does not explicitly disclose a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1 further comprising a holding module that shifts the proof print job to either one of a 'held' status and a 'retained' status on completion of proof print job.

Suzuki et al. disclose a job management apparatus (see Fig. 1, job processing system 10, column 14, lines 53 – 54, column 15, lines 9 – 13 and column 17, lines 29 – 48) that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1. In Fig. 1, the hold queue 19 conforms to the 'held' status disclosed in the standard (see Fig. 3, steps S109, S110, S111, column 16, line 67 – column 17, line 7 and column 18, lines 16 – 22) and the pause queue 21, which operates independently from the hold queue 19, conforms to the print jobs functioning in response to 'pause'

and 'resume' commands (see Fig. 34, pausing section 312e, resuming section 312f, column 17, lines 16 – 21, column 46, line 65 – column 47, line 6, column 47, lines 46 – 60). Although Suzuki et al. does not explicitly disclose conformity with the standard, one of ordinary skill in the art at the time of the invention can ascertain the teachings of Suzuki are functionally equivalent to the teachings of the standard. The hold queue 19 is considered analogous to a holding module that shifts the proof print job to a 'held' status, and the pause queue 21 is considered analogous to a holding module that shifts the proof print job to a 'retained' status. However, Suzuki et al. does not explicitly disclose a holding module that shifts the proof print job on completion of the proof print job.

Tang et al. disclose a job management apparatus (column 3, lines 41 – 47 and column 4, lines 37 – 41) comprising a holding module (see Fig. 3, disk drive 30) that shifts the proof print job on completion of the proof print job. The Quick Copy version (see Fig. 4B) is considered analogous to a holding module that shifts the proof print job to a 'held' status upon completion of the proof print job (column 5, lines 32 – 36, 52 – 54 and column 6, lines 2 – 6), and the Proof and Hold (see Fig. 4C) is analogous to a holding module that shifts the proof print job to a 'pause' status upon completion of the print job and awaits a 'resume' command to print residual copies (column 4, line 66 – column 5, line 11, column 5, lines 17 – 24, 40 – 44 and column 6, lines 2 – 6).

Hube, Suzuki, and Tang are combinable because they are from the same field of endeavor, being print job management systems invoking a job retention status, whether temporarily or permanently. At the time of the invention, it would have been obvious to

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one of ordinary skill in the art to include a print job management system utilizing a holding module to shift a print job to either a hold queue ('held' status) or a pause queue ('pause' status whose status is reversed to printing pending with a 'resume' command) along with a system that manages parent and offspring jobs. Furthermore, it would have been obvious to one of ordinary skill in the art to include print job management system with a holding module to store a proof print job upon its completion. The suggestion/motivation for doing so would have been to use interruption and resumption of multi-document print processing to improving efficiency, as suggested by Suzuki et al. (column 4, line 54 – column 5, 40), and to provide a variety of advanced print job control features to generate multiple copies, as suggested by Tang et al. (column 1, line 62 – column 2, line 17).

Allowable Subject Matter

15. **Claim 2** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Although there is very similar prior art, the innovative limitation that distinguishes the applicant's claim is the deletion of the attribute information prior to the shifting of the print job.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gauronski et al. (U.S. Patent No. 5,164,842) disclose a job/page proofing for electronic pages with proof jobs copied from print jobs in a separate waiting queue in a hold status.

Normura et al. (U.S. Patent No. 5,327,526) disclose a print job control system with a print job manager that sets an order and manipulates the priority of print requests.

Wanda (U.S. Patent Application 2002/0030851 A1) discloses an information processing apparatus, distributed printing controlling method, storing medium and program that produces a plurality of child print jobs for a plurality of printers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MDR



MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600